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TRANSMITTAL	Filing Date	July 7, 2003	
FORM	First Named Inventor		
(to be used for all correspondence after initial filing)	Art Unit	3617	
	Examiner Name	Frantz F. Jules	
Total Number of Pages in This Submission	Attorney Docket Number	283359-00368	
ENCLOSURES (Check all that apply)			
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Examiner: Frantz F. Jules 1

Group Art Unit: 3617

In re application of:

Kevin McQuistian et al.

Serial No.: 10/614,755

Filed: July 7, 2003

HOLLOW TIE RAILROAD SWITCHING ASSEMBLY

Attorney Docket No. 283359-00368

APPELLANTS' REQUEST UNDER 37 C.F.R § 41.39(b)(1) AND REPLY UNDER 37 C.F.R § 1.111

April 7, 2006

Commissioner for Patents MAIL STOP APPEAL BRIEF - PATENTS P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In response to the Examiner's Answer mailed on February 8, 2006 which included a new ground of rejection, Appellants request that prosecution be reopened pursuant to 37 C.F.R § 41.39(b)(1) and file the following reply pursuant to 37 C.F.R § 1.111.

No fee is believed to be required, however, if any fee is due, please charge any additional fees or credit any overpayment to Eckert Seaman's Deposit Account No. 02-2556. A duplicate copy of this sheet is enclosed.

Status of the Claims

Claims 1-18 remain pending in this application.

Claims 1-18 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctively claim the subject matter which Appellants regards as the invention.

Claims 1 and 5-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *McQuistian* (U.S. Patent No. 6,648,276) in view of *Hartung* (U.S. Patent No. 4,637,579).

Claims 7-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *McQuistian* in view of *Hartung and Schwiede* (US 20020060273 A1).

Summary of the Claimed Subject Matter

The present invention provides switching assembly for a railroad switch (see, page 2, lines 41-56). The switching assembly 32 in accordance with the present invention includes a pair of hollow ties 36, 44, a pair of supports 40, 48, and a linkage 52 (page 6, lines 160-182). The linkage 52 advantageously extends generally through the hollow ties 36, 44, whereby the cribs 336 between adjacent hollow and/or rail ties are generally free of linkage components, and the ballast in the cribs 336 can be compacted with known automated machinery (page 13, lines 388-399). The linkage 52 includes a number of lugs 72, 76, 80, 84 and a number of rods 88, 92, 100, 104, with the rods each being formed from standard bar stock and threaded, with the linkage configuration avoiding the need to custom bend any of the rods (page 7, lines 191-198 and page 11, lines 318-325). The hollow ties 36, 44 are formed from a generally available standard box section steel, as are the supports 40, 48 (page 12, lines 361-366). Each hollow tie 36, 44, including its support 40, 48, is separate from the other hollow tie 36, 44 with its associated support 40, 48, whereby the spacing between the hollow ties 36, 44 can be varied in accordance with the pitch of the other rail ties of the railroad switch (page 6, lines 176-182). Each hollow tie 36, 44 can include a heater 272, 308 within the interior thereof to overcome the effects of freezing (page 12, lines 342-353).

Argument

Claims 1-18; Rejected under 35 U.S.C. § 112, second paragraph

Claims 1-18 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctively claim the subject matter which Appellants regard as the invention. The Examiner states that, the phrase, "the point detector rod each being substantially straight and at least partially threaded" is confusing in light of the argument at page 8 of Appellants' brief regarding a ninety degree bend. More specifically, the Examiner states that "there is nothing in the specification that defines the degree of the bent (*sic*) in the point detector connecting rod." Examiner's Answer at 3.

Appellants' attorney may have misunderstood the Examiner's initial rejection. The Examiner previously stated that Figures 3 and 4 of *Hartung* (U.S. Patent No. 4,637,579) only show "minor bends" and that the "broad terminology of a substantially straight connecting rod does not remove the possibility of minor bends in the rod." Given that *Hartung* only shows a fragmented view of the lock rod assembly 24, Appellants' attorney understood the Examiner's statement to mean that the "degree of the bends" was "minor" and that a "substantially straight" rod could have "minor bends." That is, the Appellants' attorney thought the Examiner was stating that because the bends shown in Figure 4 of *Hartung* was not a sharp bend, the rod was "substantially straight."

Noting that a right angle is not a "minor bend," the example on page 8 of Appellants' brief was provided to demonstrate that a "substantially straight" rod, such as the rod shown in Figure 2, reproduced below, could be "substantially straight" even with two right angle bends.

Figure 2

Thus, the argument was that the "degree of the bends" is irrelevant to the determination that a rod, as a whole, is "substantially straight" and that such a determination could not be made based on the fragmented figure. Based on the Examiner's further comments, Appellants' attorney now believes that the Examiner contends that Figure 4 of *Hartung* shows a "substantially straight" rod by virtue of the fact that, as shown, the axis of the left end of the rod is not substantially offset from

the axis of the right end of the rod. This argument will be addressed in more detail below.

With regard to the argument and Figures on page 8 of Appellants' Brief, Appellants note that this simple line drawing was used merely to illustrate how a rod may have sharp "bends" and still be "substantially straight." Appellants have not suggested that the Figures on page 8 of Appellants' Brief represented the point detector connecting rod of the present application. That is, the Appellants' Brief at page 8 states that the illustrations are provided as an "example" and that the figures represent "a rod" and not a specific rod used in the invention. As such, the representations of a rod in those figures was a generic rod, not one of the rods recited in the claims.

Moreover, as none of the claims recite a right angle located on the point detector connecting rod and as such a shape is not disclosed or discussed in the specification, Appellants do not believe that the use of a simple line drawing as an example makes the claims indefinite under 35 U.S.C. § 112, second paragraph. That is, as the Examiner did not find the original claims to be indefinite, and as the line drawing example was not a representation of the point detector connecting rod recited in the claims, the claims satisfy 35 U.S.C. § 112, second paragraph, just as they did before the example was used.

Accordingly, Appellants request that the Examiner withdraw the rejection of Claims 1-18 under 35 U.S.C. § 112, second paragraph as set forth in the Examiner's Answer.

Claims 1 and 5-6; Rejected under 35 U.S.C. § 103(a)

Claims 1 and 5-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *McQuistian* (U.S. Patent No. 6,648,276) in view of *Hartung* (U.S. Patent No. 4,637,579). The Examiner has taken the position that *McQuistian* discloses all of the elements of Claims 1 and 5-6 but does not disclose a point detector connecting rod that is substantially straight and at least partially threaded. The Examiner has additionally taken the position that *Hartung* provides a teaching of a point detector connecting rod (26) that is substantially straight and at least partially threaded in coupling relationship to a point detector. To the contrary, however, it is respectfully submitted that *Hartung* does <u>not</u> disclose, teach, or suggest a point

detector connecting rod that is substantially straight and at least partially threaded, as has been asserted by the Examiner.

It is noted that at page 3 of the Final Office Action, dated May 27, 2005, the Examiner cited Col. 3, lines 18-22 of *Hartung* as the relevant textual portion of this reference. This portion of the text reads in its entirety:

The detector bar 44 of the switch machine 20 is connected by the coupling indicated at B to the connector rod 46 of the detector rod assembly 26 and then to a point detector attachment rod 48 which is connected to the switch points 14.

Nowhere in this text is the shape of the detector bar 44 or the connector rod 46 discussed. The Examiner further stated at page 6 of the Final Office Action, dated May 27, 2005, that Figure 4 shows "minor bends" in the lock rod assembly 24. As the text does not discuss the shape of the rods, the Examiner must base the statement that the rods of *Hartung* are straight on the Figures.

Appellants have previously provided, in the Appellants' Brief - Evidence Appendix, Exhibit A, which is Fig. 1 of *Hartung* with some additional markings in red. It is conceded that the connector rod (46) of the detector rod assembly (26) and the lock rod (40) of the lock rod assembly (24) both appear in Fig. 1 to be substantially straight when viewed from above. It is noted that Fig. 1 includes a longitudinal depiction of the connector rod (46) and the lock rod (40), and it is respectfully submitted that such a view, by itself, cannot constitute a teaching that a longitudinal member is substantially straight. It is also noted that Fig. 3 is a view from the same perspective as Fig. 1, except including the lock rod (40) and other components in enlarged proportion. Appellants have previously provided, in the Appellants' Brief - Evidence Appendix, Exhibit B, which are Figs. 3 and 4 of Hartung along with supplied red markings. Fig. 4 is a view of the same lock rod (40), but in an orthogonal direction. Fig. 4 clearly shows that the lock rod (40) includes at least a pair of bends formed therein, and such bends are indicated in Fig. 3 through the use of contour lines depicted therein, as is indicated by the red markings in Evidence Appendix - Exhibit B. It is noted that such contour lines in Fig. 3 are not depicted in Fig. 1, likely due to the much smaller depicted size of the lock rod (40) in Fig. 1.

It is submitted that Fig. 1 provides the <u>only</u> depiction of substantially the entirety of the connector rod (46) of the detector connector rod assembly (26) which is

urged by the Examiner as being substantially straight and at least partially threaded. Apart from this depiction in Fig. 1, Hartung includes no disclosure, teaching, or suggestion whatsoever that the connector rod (46) of the detector rod assembly (26) is substantially straight. Inasmuch as the plan view of the lock rod (40) of Fig. 3 depicts contour lines that are not depicted in the relatively smaller plan view of Fig. 1, it is submitted that no conclusion regarding the relative straightness of the connector rod (46) of the detector rod assembly (26) can be drawn from its depiction in Fig. 1.

The Examiner has further stated that the Figures 3 and 4 only show "minor bends" and that the "broad terminology of a substantially straight connecting rod does not remove the possibility of minor bends in the rod." Appellants agree that the word "substantially" precludes the requirement that the connecting rod be absolutely straight. Appellants suggest, however, that the characteristic of being "substantially straight" relates to the portion of a rod extending along, or adjacent to a common longitudinal axis relative to the total length of the rod. For example, the Examiner contends that the rod shown in Figure 4 of Hartung is substantially straight. That is the Examiner, apparently believes that the broken line representation of the rod is akin to its actual configuration and that the portions of the rod represented by the gaps are not considerably longer than the gaps as shown. Thus, the Examiner appears to believe that the rod shown in Figure 4 of Hartung looks similar to the altered Figure 4, shown below.

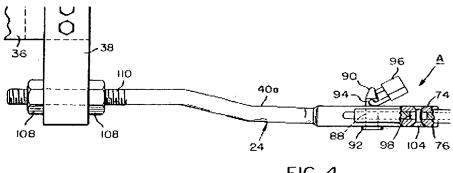
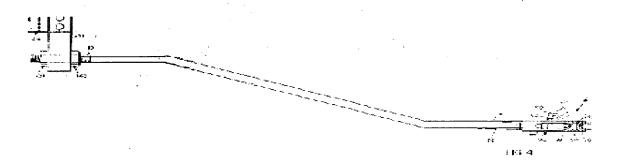


FIG. 4

Appellants disagree.

First, "substantially" is defined as, "in essence" or "in an extensive, substantial, or ample way." *See*, Encarta Dictionary at http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861716589 (attached as Exhibit 1). As a broken line drawing, by definition, removes a portion of the object, it is impossible to determine the "essence" of the object. Moreover, there is nothing in *Hartung* that discloses the length of the rod represented by the gaps in the broken line drawing. Thus, it is possible that *Hartung* discloses a rod having a configuration as shown below.



A rod in this configuration is not "substantially straight." Appellants do not mean to imply that the figure immediately above is accurate, but merely that it is a possibility. Given that *Hartung* fails to disclose the information required to determine the actual shape of the rod shown in Figure 4, it cannot be stated that *Hartung* discloses a "substantially straight" rod. Accordingly, the Examiner has failed to establish *prima* facie obviousness as required under 35 U.S.C. § 103(a).

It is conceded that the connector rod (46) of the detector rod assembly (26) is at least partially threaded, as can be seen in Fig. 6. It is reiterated, however, that the connector rod (46) of the detector rod assembly (26) is <u>not</u> additionally disclosed, taught, or suggested in *Hartung* as being substantially straight, as is required by Claims 1 and 5-6.

Thus, based on the disclosures in the cited references, it can only be concluded that *Hartung* has no disclosure, teaching, or suggestion that the connector rod (46) that is "substantially straight", and that the other teachings of *Hartung* would strongly suggest that the connector rod (46) rather is bent to enable it to pass underneath a rail. It is thus submitted that *Hartung* does not disclose, teach, or suggest the limitation of

a point detector connecting rod that is substantially straight, as is required by Claims 1 and 5-6.

Moreover, McQuistian and Hartung fail to suggest a combination of the references. As stated in, In re Geiger, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987), "obviousness cannot be established by combining teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting combination" (emphasis added). Put another way, "the mere fact that disclosures or teachings of the prior art can be retrospectively combined for the purpose of evaluating obviousness/nonobviousness issue does not make the combination set forth in the invention obvious, unless the art also-suggested the desirability of the combination" Rite-Hite Corp. v Kelly Co., 629 F.Supp. 1042, 231 USPQ 161, aff'd 819 F.2d 1120, 2 USPQ2d 1915 (E.D. Wis. 1986) (emphasis added). Similarly, the court in, In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), stated that "both the suggestion [to make the claimed apparatus] and the reasonable expectation of success must be found in the prior art, not in the Applicants' disclosure". Here, there is no suggestion that the cited references should be combined. As such, the combination of these references would not be obvious to one skilled in the art.

The Examiner has further cited *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir 1992) for the proposition that "obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art." Answer at 9. The Examiner further indicated that "an ordinarily skilled artisan would be motivated to include the teaching of a point detector connecting rod (46) that is substantially straight and at least partially threaded of *Hartung* and that of 'a first hollow tie housing an operating connecting rod and lock rod and a second hollow tie housing a lock spread rod, a lock connecting rod, and a point detector connecting rod of *Schwiede* into *McQuistian* in order to achieve among others the benefit of preventing damage to the switch assembly during the maintenance of the track bed." *Id.* at 10. The Examiner, however, has not applied the standard set forth in the cases cited in the Answer.

In *Fine*, the court initially notes that the PTO has the burden of establishing a *prima facie* case of obviousness and further states that, "this burden [can be satisfied] only by *showing* some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." 5 USPQ2d at 1598 (emphasis added). The court then noted that the Examiner in that case had failed to show the requisite teaching or suggestion in the cited references and that the Examiner's "bald assertion" without any support or explanation did not satisfy the PTO's burden. *See*, 5 USPQ2d at 1599. Similarly, the court in *Jones*, which cited *Fine* to establish the rule, noted that because the PTO failed to present any evidence that one skilled in the art would have been motivated to combine the cited references, the PTO did not establish a *prima facie* case of obviousness. *See*, 21 USPQ2d at 1944.

. . .

Here, the rejections under 35 U.S.C. §103(a) are improper because the Examiner has not shown that there is a suggestion that the cited references should be combined. The Examiner, essentially, makes a bald assertion that the references may be combined. That is, the Examiner has simply cited selected elements from two different references and said they may be combined. Such a combination, however, has not been supported by any evidence. The Examiner's error is rooted in the misinterpretation of the rule set forth in Fine. The Examiner contends that "obviousness can only be established by combining or modifying the teachings of the prior art." However, Fine actually states that the PTO's burden can be satisfied only by showing that knowledge generally available to one of ordinary skill would lead to the combination of the relevant teachings of the references. Accordingly, in this application, as in Jones, the Examiner has failed to present any "evidence, other than the PTO's speculation (if it can be called evidence) that one skilled in the art would have been motivated [to combine the references]" 21 USPQ2d at 1944 (emphasis in original). As such, in this application, as in *Jones*, "the PTO did not establish a prima facie case of obviousness..." Id.

Since the references, whether considered individually or in combination, fail to disclose, teach, or suggest all of the elements of Claim 1, the rejection of Claim 1, and, by dependence Claims 5 and 6, on the ground of obviousness is in error and should be withdrawn.

Claims 7-10; Rejected under 35 U.S.C. § 103(a)

Claims 7-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *McQuistian* in view of *Hartung and Schwiede* (US 20020060273 A1). As set forth above regarding the rejection of Claims 1 and 5-6, it is reiterated that *Hartung* includes no disclosure, teaching, or suggestion of a connector rod (46) that is substantially straight. While the connector rod (46) *appears* from the perspective of Fig. 1 to be substantially straight, it is noted that the connector rod (46) must pass underneath a rail for connection with other structures, and known bends in the lock rod (40) that are depicted in Figs. 3 and 4 of *Hartung* are <u>not</u> similarly depicted in Fig. 1. It is thus submitted that *Hartung* fails to disclose, teach, or suggest a point detector connecting rod that is substantially straight. Further, it is again noted that in order to use a combination of references the Examiner must show where the references include a "teaching, suggestion, or incentive supporting combination." *In re Geiger*. Again, the Examiner has failed to show where these references provide such a teaching, suggestion, or incentive.

Since the references, whether considered individually or in combination, fail to disclose, teach, or suggest all of the elements of Claim 7 and, by dependence, Claims 8-10, the rejection of Claims 7-10 on the ground of obviousness is in error and should be withdrawn.

Conclusion

In view of the remarks above, Appellants respectfully submit that the application is in proper form for issuance of a Notice of Allowance and such action is requested at an early date.

Respectfully submitted,

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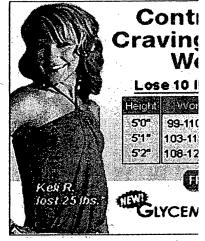
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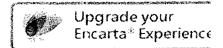
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